

IN THE CLAIMS:

Please amend claims 1, 9, and 17 as follows.

1. (Currently Amended) A method, comprising:

receiving data;

performing quadrature amplitude modulation on the data and outputting

quadrature outputs;

adjusting a DC offset at a digital domain of the quadrature outputs and generating a digital signal;

converting the digital signal to an input current using a digital to analog converter;

~~receiving an input current from a digital to analog converter;~~

mirroring the input current;

converting the received input current to a voltage;

filtering the voltage; and

converting the filtered voltage into an output current using the mirrored input current.

2. (Original) The method of claim 1, wherein the filtering is performed by a low pass filter.

3. (Original) The method of claim 2, wherein the low pass filter includes a third order RC filter.

4. (Original) The method of claim 1, further comprising outputting the output current to a mixer.
5. (Original) The method of claim 1, wherein the converting the received input voltage and the converting the filtered voltage are performed by a first and second MOSFET, respectively.
6. (Original) The method of claim 5, wherein the second MOSFET is the inverse of the first MOSFET.
7. (Original) The method of claim 1, wherein the filtering filters out clocking glitches and quantization noise.
8. (Original) The method of claim 1, wherein the filtering yields a DC gain of one.
9. (Currently Amended) A system, comprising:
 - a modulator configured to receive data, to perform quadrature amplitude modulation on the data, and to output quadrature outputs;
 - a DC offset adjustment engine configured to adjust a DC offset at a digital domain of the quadrature outputs and generating a digital signal;

a digital to analog converter configured to convert the digital signal to an input current;

~~a current mirror that mirrors~~configured to mirror an the input current ~~from a digital to analog converter;~~

~~a first MOSFET capable of converting~~configured to convert the received input current to a voltage;

~~a filter, communicatively coupled to the first MOSFET, capable of filtering~~configured to filter the voltage; and

~~a second MOSFET, communicatively coupled to the filter and the current mirror, capable of converting~~configured to convert the filtered voltage into an output current using the mirrored input current.

10. (Original) The system of claim 9, wherein the filter includes a low pass filter.

11. (Original) The system of claim 10, wherein the low pass filter includes a third order RC filter.

12. (Original) The system of claim 9, further comprising means for outputting the output current to a mixer, the means communicatively coupled to the second MOSFET.

13. (Original) The system of claim 9, wherein the second MOSFET is the inverse of the first MOSFET.
14. (Original) The system of claim 9, wherein the low pass filter filters out clocking glitches and quantization noise.
15. (Original) The system of claim 9, wherein the low pass filter yields a DC gain of one.
16. (Original) A transmitter incorporating the system of claim 9.
17. (Currently Amended) A system, comprising:
means for receiving data;
means for performing quadrature amplitude modulation on the data and outputting quadrature outputs;
means for adjusting a DC offset at a digital domain of the quadrature outputs and generating a digital signal;
means for converting the digital signal to an input current using a digital to analog converter;
means for receiving an the input current from a digital to analog converter;
means for mirroring the input current;

means for converting the received input current to a voltage;

means for filtering the voltage; and

means for converting the filtered voltage into an output current using the mirrored input current.